Sustainable Energy Plan For the Ameren Utilities

- Plan for Energy Efficiency and Demand Response
- Plan for RPS
- Collaboration with Stakeholders
- Timetable for Implementation
- Conclusion

Ameren's RPS and Energy Efficiency Goals

- Applicable to Ameren Utilities
- 2% of energy sales (less than 1MW) in 2006, increasing 1% annually until, in 2012, 8% is generated by renewable resources
- For Ameren's Illinois Control Area, the RPS goal would require wind renewables of 125 MW in 2006, growing to 530 MW in 2012
- 10% of annual load growth in 2006 growing to 25% of annual growth in 2015
- For Ameren's control area, the energy efficiency goal would require 20,000 MWH in 2006, growing to 60,000 MWH in 2015

Energy Efficiency & Demand Response

The Ameren Utilities have adopted a strategy that will achieve both near-term and long-term goals

- Long-term, Ameren proposes implementation of energy education and pricing programs
 - We believe informed energy consumers will make better energy usage decisions
 - Increasing energy efficiency awareness is a longer-term proposition
 - More challenging to measure success
- **Near-term**, traditional energy efficiency programs can achieve measurable savings of energy and demand
 - Can typically be implemented quickly with an immediate impact
 - Can contract for cost effective strategies and measures
 - May not encourage behavioral change of participants
 - Easier to measure energy savings
 - Estimated annual savings target is about 21,000 MWHrs
- A balanced approach is required!

Ameren's Proposal For Potential Long-Term Energy Efficiency Programs Our Long Term Vision of Energy Efficiency

- Depend on customers to make informed decisions on energy efficiency options, i.e., appliances, lighting, home construction, windows, insulation
- Customers respond to real time energy prices by adjusting their daily load shape
 - Washing / drying delayed until hourly prices decline
 - Customers pre-cool home on summer days
- We believe this is the only way to achieve sustainable energy efficiency...
 - Rebates and freebies not as effective in promoting education and behavioral change

Ameren's Proposal For Potential Near-Term Energy Efficiency Programs Our Near-Term Vision of Energy Efficiency

- Achieve immediate total annual energy savings of approximately 10% of Ameren annual sales growth rate in Illinois – approximately 20,000 MWH per year
- Build upon "best practice" programs utilized across the nation

Examples Of Most Likely Near-Term Energy Efficiency Programs

■ RES New Construction

 Work with builders etc. to promote improvements in building shell and appliance efficiencies beyond basic building code and standard practice levels

■ RES Lighting

 Reduce market price and encourage purchase of compact fluorescent lamps (CFL)

Examples Of Most Likely Near-Term Energy Efficiency Programs

■ Small Commercial Audit

 Offer reduced costs on energy audits to identify energy efficiency opportunities and possible credits for verified energy efficiency improvements

Example Of Education Based Energy Efficiency Program

Target market: High school students and their families

- Combine classroom instruction with a household energy survey to educate high school students and their families about:
 - household energy usage
 - electric bill disaggregation
 - customized recommendations for cost effective energy efficiency measures

Proposed Metric For Education Based Programs

- Near-term MWH savings difficult to identify
- Measure success in terms of a customer "energy efficiency awareness index"
- Evolve metric over time to a measurement of customer behavioral changes
- Ultimate goal: Use customer behavior changes to model estimates of MWH impacts attributable to education and information programs

Near-Term Demand Response (DR) Proposal

- Principle: Price is powerful information. Customers prefer choice and control over energy consumption. Price of energy leads to knowledge of energy options. Knowledge of energy options leads to responsible energy consumption behavior.
- Proposed program: Residential Real-Time Pricing (RTP)

Residential RTP - Timeline

Benefits of a Collaboration Process

- An expedited collaborative process will be helpful
 - Finalize plan details with input from stakeholders
 - Ameren does not have all the answers
 - Will help shorten formal proceedings
 - Will hopefully eliminate contested issues
 - May result in greater uniformity between utility proposals
 - Help establish a process for non-wind renewable projects

RPS Collaborative Process

- Collaborate with the <u>renewables industry</u> and other stakeholders to finalize filing:
 - Long-term supply contracts for wind and non-wind projects
 - Process for wind and non-wind renewables procurement
 - Definitions for renewable certificates/credits
 - Metrics for measuring goals
 - Process for purchases from small projects
 - Address IDC issues
 - Cost recovery charge and tariff provisions

Energy Efficiency/Demand Response Expedited Collaborative Process

- Collaborate with <u>energy efficiency</u> experts and other stakeholders to develop:
 - Terms for energy efficiency contracting
 - Measures to be bid
 - Process for soliciting bids
 - Role of education programs
 - Metrics for achieving goals
 - Cost recovery charge and tariff
 - Address IDC issues

Proposed Timetables for Implementation